REMARKS

The title has been amended to address the specification objection noted in the Official Action.

Claims 1-13 are pending in the application. Claims 2, 3, 5, 6, 8, 9, 11 and 12 are withdrawn from consideration.

Claims 1, 4, 7, 10 and 13 are rejected as unpatentable over Applicant's disclosed prior art in view of CHOI et al. 6,429,918 and LEE et al. 6,281,953 and further in view of SATO et al. 6,335,772. This rejection is respectfully traversed.

Claim 1 is amended to clarify "between 100 & $10^5\Omega$ cm" by reciting that the resistance value of the black matrix is greater than 1×10^2 and less than $1 \times 10^5\Omega$ cm.

As disclosed on page 17, lines 15-27 of the present application, for example, having a resistance of the black matrix layer in the recited range when the black matrix layer overlaps gain lines and drain lines as seen in plan view and the black matrix layer constitutes direct capacitive coupling with the drain lines and the gate lines free from any electrode therebetween enables the luminance at displaying black to stay in the vicinity of 0.5 cd/cm^2.

As noted in the Official Action, neither Applicants disclosed prior art nor TROY et al. nor LEE et al. teach the recited limitation. Specifically, Applicants disclosed prior art teaches a black matrix resistance value between about 10Ω cm and about 12Ω cm. CHOI et al. teach the resistance value of the

black matrix of $10^6\Omega$ cm and LEE is silent as to the teaching of a resistance value of the black matrix.

SATO et al. is combined with the above-references in an attempt to overcome the shortcoming of the above-references. However, SATO et al. at column 3, line 58 through column 4, line 18 discloses a light shielding layer (black matrix) as having a sheet resistance not higher than 100Ω cm. Thus, the teaching of SATO et al. is not to exceed a value of 100Ω cm. The recited range is greater than 1×10^2 (100) and less than $1 \times 10^5\Omega$ cm. Accordingly, SATO et al. does not fall within the recited range. Indeed, SATO et al. directly teaches away from the recited range.

As set forth on column 3, lines 58-62 of SATO et al., the range of SATO et al. is chosen to restrict the capacitive coupling between the electrically conductive light-shading layer and the adjacent wiring. Such value is chosen as small as possible such that the SATO et al. preferred range is not higher than 10Ω cm.

As set forth above, the object of the present invention is to choose the resistance of the black layer and the recited range so that the luminance at displaying black stays in the vicinity of 0.5 cd/cm^2. One of ordinary skill in the art reading SATO et al. would want to reduce the capacitive coupling as much as possible to prevent the deterioration of the image quality. Therefore, one of ordinary skill in the art would not look outside the upper ranges of SATO et al. and thus would not find

it obvious to use a resistance value of the black matrix greater than 10^2 and less than $10^5\Omega$ cm as recited in claim 1 of the present application.

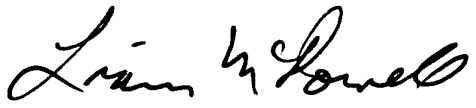
Claims 4, 7, 10 and 13 depend from claim 1 and further define the invention and also are believed patentable over the cited prior art.

In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON



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